

## ABSTRACT

### IMPROVED ELECTROCHROMIC LAYER AND DEVICES COMPRISING SAME

The present invention provides improved electrochromic layers, which comprise polymeric matrices with electrochromic solutions interspersed therein. Varying an electrical potential difference across a layer of the invention results in reversible variation in the transmittance of light across the layer because of electrochemical processes in the electrochromic solution of the layer. The invention further provides electrochromic devices, in which the electrochromic layers of the invention provide reversibly variable transmittance to light, and various apparatus in which the devices of the invention provide light-filtering or light-color modulation. Such apparatus include windows, including those for use inside and on the outside walls of buildings and in sunroofs for automobiles, and variable reflectance mirrors, especially rearview mirrors for automobiles.